

We've identified 2 general areas of concern for the clients. The questions and comments are addressed below:

- Growth in impacts between 2012-2018 not addressed through the NEPA review
- SEA 3rd Runway Use

NEPA reviews are required for federal actions which in the airport context, are typically those associated with the approval, execution, or funding of projects. NEPA reviews are intended to assess the impacts resulting from a proposed action. In the case of the SAMP, NEPA will identify the environmental impacts associated with the construction of projects within the SAMP. At least three scenarios will be included: 1) Existing conditions (current operations and impacts), 2) Future conditions with implementation of the SAMP projects (based on forecast operational levels and resulting impacts), and 3) No-Action future scenario with forecast operations and resulting impacts). This will represent total operations and impacts with no SAMP projects implemented.

The growth in impacts based on the growth in operations from 2012-2018 will be included in the existing conditions assessment in the SAMP NEPA review. This will include noise exposure contours based on the existing operations which is the product of the growth since 2012. NEPA will not specifically look at a comparison of conditions from 2012-2018. This would have been analyzed in previous NEPA work, associated with construction projects completed by the Port.

The last Part 150 analyzed operations and noise exposure from 2013 (existing/baseline conditions) and 2018 (future/forecast conditions). The Part 150 included updates to the Airport's Noise Compatibility Program which included noise abatement and mitigation strategies.

Recommendations approved by the FAA should be in effect currently. When the Part 150 is updated, an assessment of the existing conditions (with the growth in operations since 2013) will be assessed, in addition to a future forecast of operations and impacts. Based on the future case, new noise abatement and mitigation elements will be developed and proposed to FAA for approval.

Recommendations approved by the FAA through the Part 150 process are not required to be implemented. FAA approval only means the airport will be permitted to pursue the recommendations for implementation, usually subject to specific caveats (such as acceptance by FAA air traffic control and/or the airlines), and it typically means the recommendation will

(may) be eligible for federal funding through the Airport Improvement Program (AIP) or Passenger Facility Charges (PFCs). The airport is not obligated to implement the measures as Part 150 is voluntary.

Once a Part 150 is completed and approved, the FAA may require the airport to update the Noise Exposure Maps and/or the Noise Compatibility Program based on time (typically after 5-7 years) or based on a change in noise exposure levels, changes in operations, or changes in fleet mix. The Port has indicated the Part 150 would be updated following completion of the SAMP NEPA/SEPA reviews.

Regarding the 3rd runway, our understanding is it was initially needed for inclement weather when capacity with the dual-runway system was inadequate to meet demand, resulting in delay. It is likely that there was a miscommunication or misunderstanding among the community members and the Port regarding the ultimate use of the third runway. The consulting team is willing to review formal documentation from the Port or FAA related to the third runway. Ultimately, federal aviation regulations state that the federally funded assets such as runways will be available for use when deemed necessary by air traffic control.

Proposed Actions to address:

Note: This work will be beyond the scope of the existing contract, however we wanted to make sure to give you an overview of possible actions to address these concerns.

Based on the clients' concerns about the current level of **noise impact** resulting from the growth in operations between 2012-2018, the following actions are proposed:

- Review of the original Part 150 studies and all subsequent updates to inventory all approved measures and status of each (implemented, not implemented, ongoing, etc). During this process we will identify all measures in the current Part 150 and ensure which, if any, have not been implemented.
- Review the NEPA documents for projects that the clients believe enabled the growth in operations from 2012-2018 to ensure operations and impacts were properly assessed.
- Review historical documentation associated with the SEA 3rd Runway to understand justification and business-case used for construction of the 3rd Runway. The consulting team will also assess use of the 3rd runway to determine impacts to the client

communities. These impacts will also be reviewed against the impacts assessed in the NEPA documents for the 3rd runway.

- The consulting team will support the clients in engaging the Port, FAA, and the airlines to address concerns related to the existing and future impacts associated with SEA flight operations. This will leverage the StART committee, but also utilize other channels including working directly with FAA, the airlines, and the Port.

ABCx2 Review of Arlyn Purcell's presentation to Burien regarding SAMP EIS near term projects:

Presentation Noted Changes include:

- *A review of current airport impacts back to 2018 as opposed to 2012*
- *Initiating the Part 150 process following the SAMP EIS process as opposed to having it occur prior or concurrently*
- *The statement that the Part 150 process is voluntary on behalf of the Port of Seattle.*
- *The articulation of process and intent on the part of the Port of Seattle were at times stunning and left our Councilmembers and staff with many more questions than answers."*

A review of current airport impacts back to 2018 as opposed to 2012

The environmental review process under both federal (NEPA) and state (SEPA) regulatory framework are associated with federal/state. As an example, when FAA funds a project at an airport, the funding of the project constitutes a federal action. NEPA requires environmental review for federal actions which may have environmental impacts. The growth in operations (2012-present) does not constitute a federal (or state) action, therefore, it would be inappropriate to conduct a NEPA/SEPA analysis specifically on the growth. The expansion and construction projects and their subsequent (forecasted) impacts are subject to environmental review. *Between 2012 and 2018, there have been significant construction projects at Sea-Tac; specifically the enhanced international terminal and the north satellite area. The number of flights have increased substantially over this time period and these projects and others have been initiated to accommodate this growth. Prior NEPA and SEPA analysis did not consider the growth and enhanced construction projects during this time period. Why would this growth in operations and construction projects not be considered in the current NEPA/SEPA analysis?*

NEPA and SEPA require assessment of existing conditions and a comparison to future conditions based on a preferred alternative or action and an assessment of future conditions based on no-action. The impacts associated with no-action are not significant in terms of NEPA/SEPA. What is significant is the difference in environmental impact. *The impact of growth of operations and projects between 2012 and 2018 come with additional environmental impacts (noise, traffic, environmental concerns). Can this be considered in the current NEPA/SEPA analysis?*

In other words, how much (if any) environmental impact will result if the preferred action or project is implemented? If there is no action, what will the impact level be? Then, how much additional impact will there be, attributed specifically to the project or action. That increased (or decrease) in impact is what the environmental review is intended to identify and quantify. *The growth and construction projects to increase capacity between 2012 and 2018 have not been part of a NEPA/SEPA analysis. Significant runway enhancements have occurred during this period in addition to a different use of the Third Runway. It is now a main runway as opposed to be only used during inclement weather. These runway use changes have not been the subject of a NEPA/SEPA analysis.*

Additionally, in the case of an EIS, mitigation strategies are identified to minimize the environmental impacts where possible. Complete mitigation of impacts is not required under NEPA, only identification of mitigation strategies. Limitations or statutory requirements related to environmental impacts may be addressed through federal and state regulations (i.e. Clean Air Act, FAR Part 150, etc.). *Given the growth between 2012 and 2018, it is believed more mitigation strategies are needed given the environmental impacts to residence (noise, increased frequency flights, etc.)*

The growth in operations and impacts will be identified in the existing condition scenario in the NEPA and SEPA assessments. This will be represented in the “current” condition in terms of current noise exposure level, air quality and emissions levels, etc. The change in impact from 2012-present will not be specifically assessed, because the growth in operation does not constitute a federal or state action (??). Growth in and of itself is not subject to NEPA/SEPA. *Does growth, enhanced projects to accommodate growth on Port property, and runway enhancements, all of which have federal funding, trigger a NEPA/SEPA review?*

To some degree, the NEPA process will (can) include consideration or acknowledgement of the growth at SEA and resulting environmental impacts associated with the 2012-2018 increase in operation. *What steps can be taken to ensure consideration of these impacts in the current NEPA/SEPA process?*

CFR Title 40, Chapter V - Council on Environmental Quality § 1508.7 addresses cumulative impacts:

“Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.”

While this may not address the clients’ desire to specifically quantify the growth in impacts attributed to the growth in operations between 2012-2018, this is all that federal statute requires. Ultimately the core questions are:

1. *What are the impacts today and what will be the additional level of environmental impact if the SAMP projects are implemented?*
2. *What would be the level of impact if the SAMP projects were not implemented?*

As the cities have noted, the Port’s development actions are enabling growth. The growth and impacts associated with that growth (enabled by the SAMP projects) will be identified and described in the environmental reviews.

A specific analysis of the environmental impact attributed to growth (apart from projects of actions that specifically facilitated said growth) is not subject to NEPA/SEPA. Having said that, the environmental impacts in all areas; air quality, water quality, noise exposure, etc., are subject to existing federal and state laws, so if there is a concern or claim that federal or state thresholds are exceeded, this could be subject to enforcement action.

Initiating the Part 150 process following the SAMP EA/EIS process as opposed to having it occur prior or concurrently.

It is at the Port’s discretion as to when they decide to update the Part 150, but most airports would likely choose to not embark to two major environmental review projects at one time, especially when the two will overlap. Noise exposure assessments will be developed as part of the NEPA process. Aircraft forecasts, fleet mix assumptions, etc., will all be required in both the

environmental assessment and the Part 150 update. To conduct both studies at one time would introduce unnecessary complexities for the Port, the project teams, and the public.

Securing public participation in these processes is often difficult. Conducting two at one time, would likely reduce public participation in one or both processes. In addition, both efforts require public input opportunities and to some level, public involvement. The SAMP environmental reviews will likely leverage existing committees such as the StART. A Part 150 typically includes a public advisory committee (or similar working group) to help gain input from stakeholders including the affected community. Running these processes simultaneously could overburden both the public stakeholders (as well as the staff from key departments including Environmental, Noise, Public Affairs, etc.

In our opinion, we see little or no downside for the clients, whether the Part 150 is done concurrently to the SAMP environmental reviews or after. If the EA identifies impact levels requiring mitigation under NEPA such as increased noise exposure based on future conditions (existing noise exposure plus additional noise exposure based on forecast operations levels), mitigation elements will be required. This is the functional equivalent (though simplified) to the Part 150 process. And while the Part 150 may result in the development of new noise abatement and mitigation strategies, these may also be explored, designed, and deployed outside the Part 150 process leveraging the StART committee and the environmental reviews for the SAMP. The Part 150 process is yet another opportunity to assess noise exposure levels and to identify mitigation, but it's not the only one. We recommend leveraging all existing opportunities to quantify noise exposure levels, levels of community impact, and opportunities to mitigate those impacts. Additionally, the Part 150 process typically identifies noise abatement and mitigation specific to DNL 65 exposure levels. As we've heard from the clients, many communities and portions thereof are impacted, well below the DNL 65 dBA threshold and industry should acknowledge this. While it is possible, Part 150 is often focused solely on reducing DNL 65 exposure where the NEPA process and the ongoing work by groups such as StART allow the opportunity to look for mitigation of impacts below this federal threshold. *The Port has stated publicly that StART will not be considered as meeting requirements under the NEPA and SEPA process. The goals of StART were to increase understanding, enhance relationships between "airport" communities, and collaborate on ways to address noise and environmental*

concerns. The Cities supported not having StART being associated with the SAMP EIS requirements. Through StART, we are attempting to get to action on steps to address noise and environmental concerns.

The statement that the Part 150 process is voluntary on behalf of the Port of Seattle

The Part 150 process is in fact voluntary for airports. Many airports develop noise abatement programs outside the federal process and requirements associated with the FAR Part 150 requirements. Those that do engage in the process may be eligible for federal funding for noise abatement and mitigation elements developed through the process. Once a Part 150 is completed, updates may be mandated by the FAA. Typically, updates are conducted every 5-7 years. The requirement to update the Part 150 can also be triggered based on significant changes in operations, fleet mix, or change in noise exposure levels. In some cases, update of the Noise Exposure Maps (NEM) may be all that is required. In other cases, updates to both the NEMs and Noise Compatibility Program (NCP) may be mandated. This requirement is typically included as a measure within the NCP. The excerpt below is from the SEA Part 150 update completed in 2013 and approved by the FAA in 2014. *In the event the Port of Seattle does not follow through on the requirements in a Part 150 process after receiving federal funds, is there a penalty associated with their noncompliance? Is there a risk for having to return federal funds if the criteria is not met? Are future allocation of funds at risk if abatement/mitigation elements are not met from prior Part 150 processes?*

Measure P-2: Periodically review and, if necessary, update the Noise Exposure Maps (NEMs) and the Noise Compatibility Program (NCP)

The NEMs should be updated every five years or when there are significant changes in operating levels and patterns in accordance with the FAA's guidelines for determining what constitutes a potentially significant increase in operations (1.5 dB DNL increase in the area impacted by 65+ DNL).

The NCP should be updated every five years, or as necessary, to reflect any broader changes in the nature of aircraft noise surrounding the Airport. Should any on-airport development, such as runway extensions or significant modifications to ground facilities, enlarge the area of incompatible use exposed to aircraft noise above 65 Day-

Night Average Sound Level (DNL), the NCP should be updated prior to the implementation of those improvements. A full update may not be required, but rather, a targeted assessment of the changes occasioned by specific development projects may suffice to bring the NCP to conformity and to qualify additional areas for NCP programs, if appropriate.

The requirement and timing of updating the Part 150 falls under the discretion of the Federal Aviation Administration and typically, the regional Airports District Office (ADO). With the last Part 150 update being completed in 2013, the Port is still within the typical 5-7 year timeframe for updating the 150. And since making the commitment to update it following completion of the SAMP NEPA and SEPA work, it is likely the FAA has accepted this timeframe.

While the 5-7 year is one trigger for updating a Part 150 study, the significant increase in annual operations at SEA is another justification for update. We recommend the clients track the progress of the SAMP and subsequent planning of the upcoming Part 150 update. However, as noted, the SAMP environmental review process and the StART program are both important opportunities to engage the airport in an effort to acknowledge and mitigation noise exposure and community impacts attributed to the airport. And prior to embarking on the Part 150 process, the clients should take advantage of the flexibility available outside the stringent Part 150 process.

For reference, an overview of the Part 150 Program is available on FAA's website here:

https://www.faa.gov/news/fact_sheets/news_story.cfm?newsId=18114

The articulation of process and intent on the part of the Port of Seattle were at times stunning and left our Councilmembers and staff with many more questions than answers.

We viewed Port presentation, Q&A, and public comments. We are unclear what the specific questions or concerns are but would be happy to provide input based on specific questions or comments about the presentation or the Port's process and intent.

Additional comments after reviewing the video.

During her presentation, Ms. Purcell explained that the Port is limiting the environmental review (NEPA/SEPA) to the near-term projects because those are the projects the Port is able to pursue in consideration of existing airfield, airspace, and financial constraints. Environmental reviews are conducted after a project is scoped and designed. The elements in the "Long-Term" vision exist as concepts only and may or may not come to fruition.

Implementation of the Ground Run-Up Enclosure was under consideration and had been for some time, but according to Ms. Purcell, this facility is no longer under consideration as part of the near-term projects but remains part of the long-term plan. An analysis of ground noise sources was also mentioned. If this analysis suggests engine run-up activity is a significant source of community noise exposure and subsequent impact, prioritization of the GRE should be encouraged. Worth noting, she stated the number of run-ups conducted by the airlines has decreased significantly due to maintenance operations being conducted elsewhere. However, with the continued growth by Alaska Airlines and Delta Air Lines, both of which have maintenance facilities at SEA, engine run-ups, especially overnight when this activity is most common, may be a concern for local communities. ***This is an area for us to follow-up on.***

I would carefully assess whether ground run-ups are an issue for the client communities and prioritize accordingly. Aside from ground run-up enclosures, there are other measures airports can implement to reduce the community impacts associated with maintenance activities. If this is an issue for the clients, we can investigate the issue at SEA and propose recommendations to reduce these impacts.

During the Q&A, three studies were mentioned by Ms. Purcell. These included a study by the Port to quantify Greenhouse Gas (GHG) emissions associated with aircraft emissions. She also mentioned the ongoing study by the University of Washington investigating ultrafine particulates (UFP) and the contribution by aircraft operations (versus other sources in the region). And already mentioned briefly, the Port will be hiring a firm to conduct an analysis of ground noise to identify sources which may include engine run-up activity, taxi operations, reverse thrust, and takeoff rotation. The results of this study may identify areas of focus for the clients.

When asked about the use of noise metrics beside DNL, Ms. Purcell noted that the DNL metric and specifically the DNL 65 dBA threshold is currently the only metric approved by the FAA and that if a new metric is adopted into policy with time to be incorporated into the SAMP analysis, it will be. While it is true that DNL 65 dBA is the only noise metric FAA allows for decision-making, FAA has allowed other, so-called, supplemental metrics to be used in environmental reviews as well as Part 150 studies. Metrics such as Number-of-Events-Above (NA) and Time-Above (TA) are commonly used to inform decision-making and to enhance public understanding. DNL is a cumulative metric which averages noise level over time. Clearly, people do not experience noise as an “average”. Metrics such as NA can be used to determine the number of events above a specific level (i.e. 55 dBA or 65 dBA). The TA metric quantifies the amount of time noise exceeds a specified value. For example under the existing conditions, noise at a reference point in the city of Burien exceeds 70 dBA 67 minutes per day. Based on future conditions (i.e. in the SAMP), the amount of time per day (on average) at that same reference point will be 80 minutes per day. These align more closely with what we experience and can provide clarity when comparing existing and future conditions. An example would be advising a community that before NextGen (performance-based navigation) procedures are implemented, they’d experience 10 noise events (overflights) exceeding 55 dBA and after implementation, they will experience 20. This is much more understandable than communicating via DNL (which is typically expressed in a change of 1-2 dBA or a portion of a decibel. In both cases, residents don’t really know what to expect based on forecasted changes in DNL. *Another area for us to follow-up on.*

For key stakeholders such as the local governments and municipal StART members, it is important that they truly understand current and future condition based on the community

experience when providing input or making decisions. And while it is true, FAA policy cites DNL as the only acceptable metric, less formal processes and negotiations can incorporate reference to other metrics, though federal funding may not be approved based using metrics beside DNL. We encourage the clients to pursue the use of supplemental metrics in all future noise analyses conducted SEA. Worth noting, SEA incorporated the use of supplemental metrics including TA and NA in the 2013 Part 150 Study.